

Claims

1. Process for manufacturing a vehicle body with a roof unit (23) containing an outer skin (13) and an inward facing ceiling (14), or an outer skin (13) and an inward facing ceiling (14) with a ceiling frame (15), whereby the roof unit (23) is in the form of a unit ready for installation, and a basic structure (10), and the ceiling (14) and the outer skin (13) along with the basic structure (10) feature configurations (30) for joining that mate with each other at their mutual places for joining, this for a body of a road-bound vehicle fitted together horizontally,

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characterised in that

the ceiling (14) is introduced through the opening for the rear or front window and, by means of an upward movement, is brought into contact with the matching configuration points (30) for connection on the longitudinal frames (16) at the side and/or the front and rear cross members (11, 12) where it is fixed and, in a further step, the outer skin (13) is lowered onto the corresponding matching configuration points (30) for connection to the longitudinal frames (16) at the side and onto the front and rear cross members (11, 12), and secured there by permanent joining.

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2. Process for manufacturing a vehicle body with a roof unit (23) containing an outer skin (13) and an inward facing ceiling (14), or an outer skin (13) and an inward facing ceiling (14) with a ceiling frame (15), whereby the roof unit (23) is in the form of a unit ready for installation, and a basic structure (10), and the ceiling (14) and the outer skin (13) along with the basic structure (10) feature configurations (30) for joining that mate with each other at their mutual places for joining, this for a body of a road-bound vehicle fitted together horizontally,

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characterised in that,

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the ceiling frame (15) is introduced through the opening for the rear or front window and, by means of an upward movement, is brought into contact with the matching configuration points (30) for connection on the longitudinal frames (16) at the side and/or the front and rear cross members (11, 12) where it is fixed and, in a further step, the ceiling (14) and the ceiling frame (15) are lowered followed by the roof skin

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(13) onto the corresponding matching configuration points (30) for connection to the longitudinal frames (16) and the side and onto the front and rear cross members (11, 12), and secured there by permanent joining.

5 3. Process for manufacturing a vehicle body with a roof unit (23) according to claim 2, characterised in that the ceiling (14) and the outer skin (13) are joined together as a unit and this unit is lowered onto the ceiling frame (15) and the corresponding matching configuration points (30) for connection on the longitudinal frames (16) at the side and the front and rear cross members (11, 12), and secured there by permanent
10 joining.

4. Process for manufacturing a vehicle body with a roof unit (23) containing an outer skin (13) and an inward facing ceiling (14), or an outer skin (13) and an inward facing ceiling (14) with a ceiling frame (15), whereby the roof unit (23) is in the form of a
15 unit ready for installation, and a basic structure (10) and the ceiling (14) and the outer skin (13) along with the basic structure (10) feature configurations (30) for joining that mate with each other at their mutual places for joining, this for a body of a road-bound vehicle fitted together horizontally,

20 characterised in that

the roof unit (23) containing the outer skin (13) with configuration (30) for joining, the ceiling (14) or the ceiling (14) and the ceiling frame (15), in each case with fittings already mounted in place, is introduced through the opening between the longitudinal
25 frames (16) and, by means of an upward movement, is brought into contact with the corresponding, matching configuration points (30) and permanently joined there.

5. Process for manufacturing a vehicle body with a roof unit (23) containing an outer
30 skin (13) and an inward facing ceiling (14), or an outer skin (13) and an inward facing ceiling (14) with a ceiling frame (15), whereby the roof unit (23) is in the form of a unit ready for installation, and a basic structure (10) and the ceiling (14) and the outer skin (13) along with the basic structure (10) feature configurations (30) for joining that mate with each other at their mutual places for joining, this for a body of a road-bound vehicle fitted together horizontally,
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characterised in that,

5 the side wall columns (24, 25, 26, 27) of the basic structure (10) exhibit a configuration (30) for connecting purposes and the roof unit (23) has fittings installed and the roof unit (23) exhibits a ceiling (14) or the ceiling (14) and a ceiling frame (15), and a configuration (30) for connecting to the side wall columns (24, 25, 26, 27) is provided on the ceiling (14) or ceiling frame (15) and, by lowering, raising or inserting the roof unit (23) from the front or rear, the mutual configurations (30) for connecting purposes are brought together and joined permanently with each other.

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6. A roof unit (23) containing an outer skin (13) and an inward facing ceiling (14), or an outer skin (13) and an inward facing ceiling (14) with a ceiling frame (15), whereby the roof unit (23) is in the form of a unit ready for installation, and a basic structure (10), whereby the ceiling (14) and the outer skin (13) along with the basic structure (10) feature configurations (30) for joining that mate with each other at their mutual places for joining, this for a body of a road-bound vehicle fitted together horizontally,

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characterised in that,

20 the ceiling (14) contains one or more fittings of the following type viz., ceiling cover, interior cladding, cushioning against impact, sun shields, interior back-mirror, interior lighting, wiring, operating and display elements, sliding, raising, folding, lamellar and glass roofs, and their frame parts and drive elements, and roof hand grips.

- 25 7. A roof unit (23) containing an outer skin (13) and an inward facing ceiling (14), or an outer skin (13) and an inward facing ceiling (14) with a ceiling frame (15), whereby the roof unit (23) is in the form of a unit ready for installation, and a basic structure (10), whereby the ceiling (14) and the outer skin (13) along with the basic structure (10) feature configurations (30) for joining that mate with each other at their mutual places for joining, this for a body of a road-bound vehicle fitted together horizontally,

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characterised in that,

the ceiling (14) has a sandwich structure comprising a middle layer of foam, with on one or both sides fibre mats or fleeces of glass fibres and on one or both sides plastic films, cover films and/or decorative or functional overlays.

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